

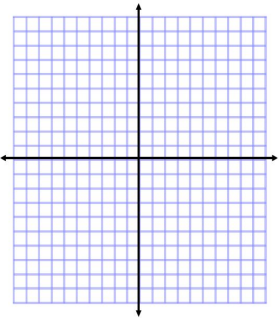
Name: _____ Date: _____

Solving Quadratic Equations REVIEW SHEET and PRACTICE!

1. When you are solving quadratic equations, you are looking for the ____-intercepts of the parabola. These are also called _____, _____ and _____.

2. Quadratic equations can have _____, _____, or no solutions.

3. Before you begin solving a quadratic equation, you must isolate _____.

Methods for Solving:	Examples:
Graphing: If you can easily sketch the graph of the related quadratic function, solve by GRAPHING and looking for the x-intercepts.	1. Solve: $-x^2 - 2 = 0$. The related QF is $y = -x^2 - 2$. 
Isolating Variable/Square Roots Method: If $b = 0$, solve by isolating the variable and taking the positive and negative square roots.	2. $5x^2 = 125$
Factoring Method: If you can factor the polynomial easily, do so and then use the zero product property to set up two equations to solve for x.	3. $x^2 - 5x = 66$
Quadratic Formula: If you cannot do any of the above use the quadratic formula.	4. $3x^2 - 8x + 1 = 0$

Write the Quadratic Formula Here:

x =

Solving Quadratic Equations: Solve each quadratic equation using the method of your choice. Show ALL work and be prepared to justify your method of solving.

5. $x^2 + 9 = 45$

6. $x^2 + 11x + 24 = 0$

7. $4x^2 + 2x = 0$

8. $2x^2 - 6 = 11x$

9. $5x^2 + x - 2 = 0$

10. $x^2 + 7x + 15 = 5$

11. $x^2 + 4 = 0$

12. $4x^2 = 64$

$$13. x^2 - 100 = 0$$

$$14. x^2 + 11x + 18 = 0$$

$$15. x^2 = 0$$

$$16. x^2 - 2x = -1$$

$$17. 3x^2 - 5 = 14x$$

$$18. 3x^2 = x + 17$$

$$19. 8x^2 + 21 = -59x$$

$$20. 15x^2 - 3x = 3 - 7x$$